

C2.301# - CUTTING UNIT BOUNDARIES (09/2001)

The boundaries of cutting units are designated as shown in the following table. The trees used for boundary designation are not to be cut.

See Cutting Unit Boundary Designation Table

Thorny Goose

C2.301# - CUTTING UNIT BOUNDARIES. (09/01)

Cutting Unit Boundary Designation Table		
Cutting Unit	Paint Color	Designation
All	Orange	Boundaries are marked with a half band with vertical lines that are in line with the unit boundary and a stump mark.

C2.352# - DESIGNATION BY SPECIES AND DIAMETER (04/2004)

Trees that meet Utilization Standards are designated for cutting, as shown on the Tree Designation Table and Sale Area Map, except trees Marked with orange paint or described to be left uncut.

See Tree Designation Table.

Additional trees to be cut, if any, are Marked with blue paint.

All live ponderosa pine, Douglas-fir, western larch, Engelmann spruce shall be left as leave trees, unless Marked with blue paint. Leave N/A trees of the designated cut species, N/A inches stump diameter or greater, to avoid leave tree spacing greater than N/A feet. Cutting unit boundaries and other trees that shall be left uncut are Marked with orange paint.

Distances are measured horizontal distance, outside bark stump height to outside bark stump height. Stump diameter is measured outside bark at stump height in a horizontal and is the average of a measurement across the short axis through the true center of the stump and a second measurement at right angles to the short axis.

Purchaser and Forest Service shall agree to skid trail location under B6.422. Skid trails shall be no greater than 12 feet wide with a 100 for non-constructed and for constructed trails 200 foot spacing.

Thorny Goose

C2.352# – DESIGNATION BY SPECIES AND DIAMETER. (4/04)

Tree Designation Table			
Subdivision(s) or Cutting Unit(s)	Designated Species	More than Stump Diameter (inches)	Less than Stump Diameter (inches)
51, 52, 54, 59, 66, 69	<u><i>live ponderosa pine, Douglas-fir, western larch, Engelmann spruce, lodgepole pine</i></u>	NA	NA

C2.356# - INDIVIDUAL TREES (LEAVE TREE MARKING) (09/2001)

Notwithstanding B2.35, all live, dead and windthrown trees meeting utilization standards in A2, in units shown as LTM on the Sale Area Map, are designated for cutting. Trees to be left uncut are marked above and below stump height as shown in the table below.

See Leave Tree Marking Table

Thorny Goose

C2.356# - INDIVIDUAL TREES (LEAVE TREE MARKING). (9/01)

Leave Tree Marking Table	
Cutting Unit	Paint Color
53, 54, 55, 57, 58, 60, 61, 62, 63, 64, 65, 67, 68 & 70	Orange

C4.211 - DOWNPAYMENT (06/2007)

The downpayment amount shown in A18 may not be applied toward any other payment required under the provisions of this contract, except damages determined pursuant to B9:4, transferred to other timber sales, or refunded until (a) stumpage value representing 25 percent of the total bid value of the timber sale has been charged and paid for, or (b) the estimated value of the unscaled timber is equal to or less than the amount of the downpayment, or (c) if 36 CFR 223.49(e) is applicable, the estimated value of the unscaled timber is equal to or less than the amount of the downpayment.

If Forest Service makes a determination that this contract should not have been included under increased downpayment requirements (36 CFR 223.49(e)), the downpayment shall be revised and applied in accordance with 36 CFR 223.49(f).

C4.212 - TEMPORARY REDUCTION OF DOWNPAYMENT (08/2009)

Notwithstanding B4.211 or C4.211, upon the Purchaser's written request Forest Service may temporarily reduce the downpayment when Purchaser's scheduled operations are delayed or interrupted for 30 or more consecutive days, or the contract term is extended for 30 or more consecutive days for any of the following reasons:

- (1) Forest Service requests or orders Purchaser to delay or interrupt operations for reasons other than breach;
- (2) Purchaser interrupts or delays scheduled operations to work on a sale designated by the Forest Service as in urgent need of harvesting; or
- (3) An adjustment of the contract term authorized upon a determination of substantial overriding public interest, including a market-related contract term addition, or an urgent removal contract term extension under 36 CFR 223.53.

When Purchaser is not cutting or removing timber under contract during a qualifying period of delay, interruption, or extension listed above the downpayment may be reduced to \$1000 or 2 percent of the downpayment amount stated in the contract, whichever is greater. The Purchaser must restore the downpayment to the full amount stated in the contract within 15 days from receipt of the bill for collection and written notice from the Contracting Officer that the basis for temporarily reducing the downpayment no longer exists. Purchaser shall not cut or remove timber on a contract where the downpayment has been temporarily reduced until the downpayment amount stated in the contract is fully restored.

C4.4 - PAYMENTS NOT RECEIVED (08/2012)

(a) Payments are due and payable on the date of issue indicated on the bill for collection. When a payment for timber cut and other charges is not received at the location designated by Forest Service by the date specified in the bill for collection for, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received. Other charges include, but are not limited to:

- (i) Slash disposal, road maintenance, and contract Scaling deposits;
- (ii) Cooperative work at rates established by specific agreement under B4.218;
- (iii) Damages pursuant to B9.4;
- (iv) Road use fees;
- (v) Restoration of downpayment pursuant to B4.22;
- (vi) Periodic payments pursuant to B4.213;
- (vii) Extension Deposits pursuant to B4.217; and
- (viii) Other mandatory deposits.

(b) Failure to pay amounts due by the date specified in the bill for collection shall be considered a breach under B9.3. The 30-day notice period prescribed therein shall begin to run as of the end of business on the date specified for receipt of payments. If the performance or payment is guaranteed by surety bond, the surety will receive a copy of the written notification of breach. Demand will be made on the surety or other institution providing the guarantee or bond instrument for immediate payment 10 days after issuance of written notification of the breach.

(c) Pursuant to the Debt Collection Improvement Act of 1996, as amended, if payment is not received by Forest Service within 15 days after the date of issue indicated on the bill for collection:

(i) Simple interest shall be assessed at the Current Value of Funds Rate as established by the Secretary of the Treasury. Interest will begin to accrue as of the date of issue indicated on the initial bill for collection.

(ii) Debtors will be assessed administrative charges, in addition to the delinquent amount due. Administrative charges are those additional costs incurred by the Government in processing, handling, and collecting delinquent debts.

(iii) A penalty charge of six (6) percent per annum will be assessed on any portion of a debt delinquent more than 90 days. This penalty charge is in addition to interest and administrative charges under paragraphs (c) (i) and (c) (ii). The penalty charge shall accrue from the date of issue indicated on the bill for collection and shall be assessed on all outstanding amounts, including interest and administrative costs assessed under paragraphs (c) (i) and (c) (ii).

(iv) Payments will be credited on the date received by the Federal Depository or Collection Officer designated on the bill for collection.

(d) Forest Service remedies for Purchaser's failure to make payment for timber cut and other charges when due, except for accrual of interest, suspension of all or any part of Purchaser's Operations, and administrative offset, shall be stayed for so long as:

- (i) A bona fide dispute exists as to Purchaser's obligation to make such payment and
- (ii) Purchaser files and prosecutes a timely Claim.

C5.12# - USE OF ROADS BY PURCHASER (06/1999)

Purchaser's use of existing roads identified on Sale Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

Code	Use Limitations
X	Hauling prohibited
R	Hauling restricted
U	Unsuitable for hauling prior to completion of agreed reconstruction
P	Use prohibited
A	Public use restriction
W	Regulation waiver

Roads coded A will be signed by the Forest Service to inform the public of use restrictions. Purchaser's use of roads coded R, A, or W shall be in accordance with the following restrictions:

See Restricted Road List Table.

C5.12# - USE OF ROADS BY PURCHASER. (06/99)

Restricted Road List					
Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
50458	Fire Camp	0	0.30	A	Seasonally closed to Public
50458	Fire Camp	Entire Length		R	Groomed snowmobile route. Leave berms far enough apart for snow groomer passage.
50478	Thorn Creek	Entire Length		R	Groomed snowmobile route. Leave berms far enough apart for snow groomer passage.
50812	Fire Goose	Entire Length		A	Closed to Public year-round
51400	Deuce	Entire Length		A	Closed to Public year-round
51401	Escape	Entire Length		A	Closed to Public year-round
51402	Flush	Entire Length		A	Closed to Public year-round
51404	Heart	Entire Length		A	Closed to Public year-round
51450	Vamp	Entire Length		A	Closed to Public year-round
51451	Wanton	Entire Length		A	Closed to Public year-round
51452	Xylem	Entire Length		A	Closed to Public year-round
51891	Full House	Entire Length		A	Closed to Public year-round

C5.124 - EXISTING ROADS (11/1998)

Notwithstanding B5.12, existing roads not shown on Sale Area Map may be used upon written agreement of use restrictions and closure requirements following completion of use.

C5.13# - ROAD COMPLETION DATE (04/2004)

Construction of Specified Roads shall be completed no later than 09/30/2021; except for earlier construction completion dates for roads listed below:

Road Number	Road Name	Station		Completion Date
		From	To	

Completion date is binding on the party that constructs road, whether Purchaser or Forest Service. Contracting Officer shall modify the completion date in writing to conform to the approved Plan of Operations under B6.311 at the request of Purchaser.

When Purchaser elects Forest Service construction of Specified Roads shown in sale advertisement, Forest Service may adjust construction completion date when road construction is delayed or interrupted for causes that qualify for an adjustment of the completion date of Forest Service's road construction contract. When qualifying delays or interruptions of road construction occur, Forest Service shall evaluate such occurrences and document any findings. The current status of any adjustment shall be available to Purchaser on request. Promptly after the end of Normal Operating Season in which qualifying days occur, Forest Service shall give Purchaser written notice of (a) number of qualifying days claimed, and (b) new construction completion dates. After all road construction is complete, Forest Service shall grant Contract Term Adjustment. Such adjustment shall be limited to road completion date delays that occurred during Normal Operating Season.

If Forest Service is responsible for road construction and the actual date of road completion is 1 year or more after the completion date stated above, Purchaser may request a rate redetermination under B3.3 for remaining volume. Such request must be made within 30 days of notification that road construction has been completed. Upon receipt of such request, Forest Service shall redetermine rates using standard methods in effect on the completion date of road construction. Rates to be established shall apply to all timber removed from Sale Area after the effective date of the rate redetermination.

Forest Service shall in no way be responsible for any delay or damage caused by road contractor in performing the road construction, except such delay as may be the fault or negligence of Forest Service.

When Purchaser constructs Specified Roads and requests Contract Term Adjustment, completion dates shall be adjusted by number of days that qualify for such adjustment, provided such qualifying days occur before specified construction completion date. When Purchaser desires to construct an alternate facility under B5.26, Forest Service and Purchaser shall agree, in writing, on a construction completion date for alternate facility. Contract Term Adjustment as noted above will apply. Completion date shall be adjusted where a Design Change or physical changes necessitate a modification of Specified Road construction work that increases the scope or magnitude of the required work.

If Purchaser fails to complete construction of any or all Specified Roads by applicable completion date, as adjusted, Contract Term Extension shall not be granted.

As used in this Subsection, construction of a road is completed when:

(a) Purchaser constructs Specified Roads and Forest Service furnishes Purchaser with written notice of acceptance under B6.36 or

(b) Forest Service constructs road and furnishes Purchaser with written notice authorizing use of

road.

Notwithstanding B5.1, Purchaser shall not use a road that Purchaser has elected for Forest Service to construct, until construction is completed and Forest Service furnishes Purchaser with written notice authorizing use of road.

C5.213# - DEPOSIT FOR RECONSTRUCTION ENGINEERING SERVICES (04/2020)

Purchaser shall make a cash deposit for engineering services (preconstruction and construction) provided by Forest Service for reconstruction of National Forest system roads necessary to accommodate Purchaser's use under this contract, pursuant to 16 USC 537.

The total amount to be deposited by Purchaser for reconstruction related engineering services to be completed by Forest Service personnel or by public works contract is \$ \$9,952.00. Purchaser shall make this deposit at the end of the first full Normal Operating Season or 12 months from contract award, whichever occurs first. If payment falls due on a date other than a normal billing date, the payment date shall be extended to coincide with the next Timber Sale Account billing date. In the event a different deposit schedule is agreed to, such deposit shall be due within 15 days after the date of issue indicated on the initial bill for collection, pursuant to B4.4.

The amount of the required deposit will be shown as an associated charge on Purchaser's Timber Sale Account. Forest Service shall retain any unexpended deposit for reconstruction related engineering services.

The deposit for reconstruction related engineering services shall be commensurate with project need and Purchaser's road use. Forest Service shall complete reconstruction related engineering services on the following schedule unless a different completion schedule is agreed in writing:

Road or Facility No.	Termini		Engineering Services Completion Date
	From	To	
N/A			

Reconstruction related engineering services may consist of some or all of the engineering work and expense of: preparing, setting out, controlling, inspecting, and measuring the reconstruction of a National Forest system road.

C5.221# - MATERIAL SOURCES (04/2004)

Sources of local materials are designated on Drawings and Sale Area Map. Forest Service assumes responsibility for the quality and quantity of material in designated sources. Purchaser shall determine the equipment and work required to produce the specified product, including the selection of acceptable material that is reasonably available in the source that meets specifications. The designation of source includes the rights of Purchaser to use certain area(s) for plant site, stockpiles, and haul roads.

Should the designated source, due to causes beyond the control of Purchaser, contain insufficient acceptable material, Forest Service will provide another source with adjustment in accordance with B5.253.

When Purchaser elects not to use designated sources, Purchaser shall furnish the specified product with no adjustment in unit rates. Quality testing shall be the responsibility of Purchaser. Test results shall be furnished to Forest Service.

When Purchaser elects not to use designated sources and the Schedule of Items lists pit development separately, cost allowance will be reduced under B5.253 when Forest Service determines the work will not be required.

When materials are subject to a weight measurement, the specific gravity or weight/volume relationship used as a basis for determination of estimated quantities shall be:

Source I N/A, Source II N/A, and Source III N/A.

Purchaser may, when agreed in writing, use on the project such suitable stone, gravel, and sand, or other material found in the excavation, and will earn a cost allowance for the excavation of such materials at the corresponding contract unit price and for the pay items for which the excavated material is used. Purchaser shall replace, without additional cost allowance, sufficient suitable materials to complete the portion of the work that was originally contemplated to be constructed with such material. Purchaser shall not excavate or remove any material, except that which is within the excavation limits, without written authorization from Forest Service.

When material is appraised from non-National Forest designated sources, owner charges for the material in terms of unit cost for royalties, purchase of raw materials, or finished products shall be as follows until N/A:

See Material Source Table.

Should quantity vary from that estimated, payment to owners shall be for units actually obtained. Purchaser shall make arrangements with owner(s) for measurement and payment for royalties, purchase of raw materials, or finished products, as shown above.

Materials produced or processed from National Forest lands in excess of the quantities required for performance of this contract are the property of Forest Service, unless prior written agreement has been obtained to use excess material on other National Forest sales. Forest Service is not obligated to reimburse Purchaser for the cost of their production.

Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials shall be located to facilitate their prompt inspection. Sites on Forest Service administered land, approved by Forest Service, may be used for storage purposes and for the placing of Purchaser's plant equipment. All storage sites provided by Forest Service shall be restored at Purchaser's expense. Purchaser shall be responsible for making arrangements for storage on other than Forest Service administered lands.

When the construction of the portion of the project for which Temporary Roads used for hauling materials is completed, all such Temporary Roads shall be restored as nearly as practicable to their original ground profile, unless otherwise agreed in writing.

C5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

Purchaser shall maintain roads in accordance with the following Contract Road Maintenance Requirements.
Summary:

See Contract Road Maintenance Requirements Summary Table.

Thorny Goose

C5.31# - Road Maintenance Requirements. (07/01)

Contract Road Maintenance Requirements Summary

Sale Name: **Thorny Goose** Date: 12-Aug-20

Road Number	Road Name	Termini		Miles	Applicable Prehaul Road Maintenance Specifications										
		From	To		801	802	803	804	805	806	807	808	809	810	811
					Slide & Slump Repair	Ditch cleaning	Surface blading	Surfacing repair	Drainage structures	Dust Abatement	Roadway Vegetation	Misc. Structures	Waterbars	Barriers	Surface Treatment
50458	Fire Camp	0	0.58	0.58	P	P	P	P	P		P	P	P		
50478	Thorn Creek	0	1.79	1.79	P	P	P	P	P		P		P		
50809	Tamgap	0	2.9	2.90	P	P	P	P	P		P		P		
50812	Fire Goose	0	0.69	0.69	P	P	P	P	P		P	P	P		
51400	Deuce	0	0.74	0.74	P	P	P	P	P		P		P		
51401	Escape	0	1	1.00	P	P	P	P	P		P		P		
51402	Flush	0	0.35	0.35	P	P	P	P	P		P		P	P	
51404	Heart	0	0.73	0.73	P	P	P	P	P		P		P	P	
51450	Vamp	0	0.24	0.24	P	P	P	P	P		P		P		
51451	Wanton	0	0.18	0.18	P	P	P	P	P		P		P		
51452	Xylem	0	0.23	0.23	P	P	P	P	P		P		P		
51891	Full House	0	0.66	0.66	P	P	P	P	P		P		P	P	

P= Purchaser Performance D=Deposit to Forest Service D3=Deposit to Third Party

Road Number	Road Name	Termini		Miles	Applicable During Haul Road Maintenance Specifications										
		From	To		801	802	803	804	805	806	807	808	809	810	811
50458	Fire Camp	0	0.58	0.58	P	P	P	D	P	P	P	P			
50478	Thorn Creek	0	1.79	1.79	P	P	P	D	P	P	P				
50809	Tamgap	0	2.90	2.90	P	P	P	D	P	P	P				
50812	Fire Goose	0	0.69	0.69	P	P	P	D	P	P	P	P			
51400	Deuce	0	0.74	0.74	P	P	P	D	P	P	P				
51401	Escape	0	1.00	1.00	P	P	P	D	P	P	P				
51402	Flush	0	0.35	0.35	P	P	P	D	P	P	P				
51404	Heart	0	0.73	0.73	P	P	P	D	P	P	P	P			
51450	Vamp	0	0.24	0.24	P	P	P	D	P	P	P				
51451	Wanton	0	0.18	0.18	P	P	P	D	P	P	P				
51452	Xylem	0	0.23	0.23	P	P	P	D	P	P	P				
51891	Full House	0	0.66	0.66	P	P	P	D	P	P	P				

P= Purchaser Performance D=Deposit to Forest Service D3=Deposit to Third Party

Road Number	Road Name	Termini		Miles	Applicable Post Haul Road Maintenance Specifications										
		From	To		801	802	803	804	805	806	807	808	809	810	811
50458	Fire Camp	0	0.58	0.58	P	P	P	P	P			P			
50478	Thorn Creek	0	1.79	1.79	P	P	P	P	P						
50809	Tamgap	0	2.90	2.90	P	P	P	P	P						
50812	Fire Goose	0	0.69	0.69	P	P	P	P	P			P			
51400	Deuce	0	0.74	0.74	P	P	P	P	P				P	P	
51401	Escape	0	1.00	1.00	P	P	P	P	P				P	P	
51402	Flush	0	0.35	0.35	P	P	P	P	P				P	P	
51404	Heart	0	0.73	0.73	P	P	P	P	P			P			
51450	Vamp	0	0.24	0.24	P	P	P	P	P				P	P	
51451	Wanton	0	0.18	0.18	P	P	P	P	P				P	P	
51452	Xylem	0	0.23	0.23	P	P	P	P	P				P	P	
51891	Full House	0	0.66	0.66	P	P	P	P	P				P	P	

P= Purchaser Performance D=Deposit to Forest Service D3=Deposit to Third Party

ROAD MAINTENANCE PLAN

T-801: Slide and Slump Repair

The maximum volume of Purchaser responsibility for Slide and Slump repair shall be 10 cubic yards per station (100 linear feet of roadway). Native material **WILL NOT** be bladed into aggregate roads. Disposal sites are not shown on Sale Area Map and will be agreed upon in writing as needed.

T-802: Ditch Cleaning

T-803: Surface Blading

Water sources are not designated on the Sale Area Map and will be agreed upon in writing as needed.

T-804: Surfacing Repair

T-805: Drainage Structures

T-806: Dust Abatement

Purchaser shall contact water master for each district prior to drafting water.

Water sources are not designated on the Sale Area Map and will be agreed upon in writing as needed. Pump hose shall have a screen over the inlet with openings no greater than 3/32" and appropriate surface area for the pump to achieve a maximum water velocity of 0.4ft/sec at the screen surface. For further specifics see C6.24#.

Unless listed below, all dust abatement will be done with water. Watering of road surfaces will be required when dust is traveling off of the road surface and/or when safety is a concern.

T-807: Roadway Vegetation

Trimmed tree branches shall be removed such that no damage to the cambium occurs.

T-808: Miscellaneous Structures

T-809: Waterbars

Roads listed in the Post Haul Maintenance table shall have water bars installed at locations directed by the Forest Service and constructed as shown on the attached drawings.

T-810: Barriers

Effective barriers are required on roads 51400, 51401, 51402, 51450, 51451, 51452, 51891

Road Maintenance T-Specifications

for

Timber Sale Contracts

To be used with Timber Sale Contract Form 2400-6, C5.31#

No.	Specification Title
T-800	Definitions
T-801	Slide and Slump Repair
T-802	Ditch Cleaning
T-803	Surface Blading
T-804	Surfacing Repair
T-805	Drainage Structures
T-806	Dust Abatement
T-807	Roadway Vegetation
T-808	Miscellaneous Structures
T-809	Waterbars
T-810	Barriers
T-811	Surface Treatment

SPECIFICATION T-800 DEFINITIONS

Wherever the following terms or pronouns are used in Specifications T-801 through T-811, the intent and meaning shall be interpreted as follows:

800-1.1 - Agreement. Maintenance projects require a mutually acceptable method to resolve the problems which arise when incompatible situations arise between drawings and specifications and actual conditions on the ground to allow orderly and satisfactory progress of the maintenance.

These specifications have been developed in anticipation of those problem areas and have provided that such changes will be by Agreement.

It is intended that drawings and specifications will govern unless "on-the-ground" conditions warrant otherwise, when specifications call for "Agreement", "agreed", or "approval" such Agreement or approval shall be promptly confirmed in writing.

800-1.2 - Annual Road Maintenance Plan. A plan prepared by various users of one or several roads. The plan is an Agreement on maintenance responsibilities to be performed for the coming year.

800-1.3 - Base Course. Material used to reinforce Subgrade or, as shown on drawings, placed on Subgrade to distribute wheel loads.

800-1.4 - Berm. Curb or dike constructed to prevent Roadway runoff water from discharging onto embankment slope.

800-1.5 - Borrow. Select Material taken from designated borrow sites.

800-1.6 - Crown, Inslope, and Outslope. The cross slope of the Traveled Way to aid in drainage and traffic maneuverability.

800-1.7 - Culverts. A conduit or passageway under a road, trail, or other obstruction. A culvert differs from a bridge in that it is usually entirely below the elevation of the Traveled Way.

800-1.8 - Drainage Dip. A dip in the Traveled Way which intercepts surface runoff and diverts the water off the Traveled Way. A Drainage Dip does not block the movement of traffic.

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800-1.9 - Drainage Structures. Manufactured structures which control the runoff of water from the Roadway including Inslope, overside drains, aprons, flumes, downdrains, downpipes, and the like.

800-1.10 - Dust Abatement Plan. A table which lists the road, dust palliative, application rates, and estimated number of subsequent applications.

800-1.11 - Lead-off Ditches. A ditch used to transmit water from a Drainage Structure or Drainage Dip outlet to the natural drainage area.

800-1.12 - Material. Any substances specified for use in the performance of the work.

800-1.13 - Prehaul Maintenance. Road maintenance work which must be accomplished to maintain the roads to a satisfactory condition commensurate with the Purchaser's use, provided Purchaser's Operations do not damage improvements under B6.22 or National Forest resources and hauling can be done safely. This work will be shown in the Annual Road Maintenance Plan as provided in C5.31#.

Prehaul Maintenance work the Purchaser elects to perform will be in compliance with the Road Maintenance T-Specifications.

800-1.14 - Roadbed. The portion of a road between the intersection of Subgrade and sideslopes, excluding that portion of the ditch below Subgrade.

800-1.15 - Road Maintenance Plan. A table which shows applicable road maintenance specifications to be performed by Purchaser on specific roads.

800-1.16 - Roadside. A general term denoting the area adjoining the outer edge of the Roadway.

800-1.17 - Roadway. The portion of a road within the limits of excavation and embankment.

800-1.18 - Shoulder. That portion of Roadway contiguous with Traveled Way for accommodation of stopped vehicles, for emergency use, and lateral support of base and Surface Course, if any.

800-1.19 - Slide. A concentrated deposit of Materials from above or on backslope extending onto the Traveled Way or Shoulders, whether caused by mass land movements or accumulated ravelling.

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800-1.20 - Slough. Material eroded from the backslope which partially or completely blocks the ditch, but does not encroach on the Traveled Way so as to block passage of traffic.

800-1.21 - Slump. A localized portion of the Roadbed which has slipped or otherwise become lower than that of the adjacent Roadbed and constitutes a hazard to traffic.

800-1.22 - Special Project Specifications. Specifications which detail conditions and requirements peculiar to the individual project.

800-1.23 - Subgrade. Top surface of Roadbed upon which Base Course or Surface Course is constructed. For roads without Base Course or Surface Course, that portion of Roadbed prepared as the finished wearing surface.

800-1.24 - Surface Course. The Material placed on Base Course or Subgrade primarily to resist abrasion and the effects of climate. Surface Course may be referred to as surfacing.

800-1.25 - Surface Treatment Plan. A table which lists the roads and surface treatments to be applied.

800-1.26 - Traveled Way. That portion of Roadway, excluding Shoulders, used for the movement of vehicles.

800-1.27 - Turnouts. That portion of the Traveled Way constructed as additional width on single lane roads to allow for safe passing of vehicles.

800-1.28 - Water Source. A place designated on the Road Maintenance Map for acquiring water for road maintenance purposes.

800-1.29 - Waterbar. A dip in the Roadbed which intercepts surface runoff and diverts the water off the Roadway. A Waterbar is not designed to be traversable by logging trucks.

SPECIFICATION T-801 SLIDE AND SLUMP REPAIR

DESCRIPTION

1.1 Slide removal is the removal from Roadway and disposal of any Material, such as soil, rock, and vegetation that cannot be routinely handled by a motorgrader during Ditch Cleaning, T-802, and Surface Blading, T-803 Operations.

Slump repair is the filling of depressions or washouts in Roadway which cannot be routinely filled by a motor grader during Surface Blading, T-803 Operations.

Slide removal and Slump repair includes excavation, loading, hauling, placing, and compacting of waste or replacement Material and the development of disposal or borrow areas.

REQUIREMENTS

3.1 Slide Material, including soil, rock and vegetative matter which encroaches into the Roadway, shall be removed. The slope which generated the Slide Material shall be reshaped during the removal of the Slide Material with the excavation and loading equipment. Slide Material deposited on the fillslope and below the Traveled Way will not be removed unless needed for slope stability or to protect adjacent resources.

Surface and Base Courses shall not be excavated during Slide removal operations.

Slide Material which cannot be used for other beneficial purposes shall be disposed of at disposal sites shown on Sale Area Map. Material placed in disposal sites will not require compaction unless compaction is shown on Road Maintenance Plan.

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3.2 When filling Slumps or washouts, Material shall be moved from agreed locations or borrow sites, placed in layers, and compacted by operating the hauling and spreading equipment uniformly over the full width of each layer.

Existing aggregate surfacing shall be salvaged when practical and relaid after depressions have been filled.

Damaged aggregate base, aggregate surfacing, and bituminous pavement shall be repaired under Specification T-804 Surfacing Repair.

The repaired areas of the Slump shall conform to the cross-section which existed prior to the Slump and shall blend with the adjacent undisturbed Traveled Way.

3.3 The maximum volume of Purchaser responsibility for Slide and Slump repair is shown on Road Maintenance Plan. Greater volumes of Slide and Slump repair not qualifying as Catastrophic Damage are Forest Service responsibility.

SPECIFICATION T-802 DITCH CLEANING

DESCRIPTION

1.1 Ditch cleaning is removing and disposing of all Slough Material from Roadway ditches to provide a free-draining waterway.

REQUIREMENTS

3.1 Ditch cleaning shall be repeated during the year as often as necessary to facilitate proper drainage.

3.2 All Slough Material or other debris which might obstruct water flow in the Roadway ditch shall be removed. Material removed from the ditch, if suitable, may be blended into existing native road surface or Shoulder or placed in designated Berms in conjunction with Surface Blading T-803 operations.

Material removed from ditches that is not by Agreement blended into existing roads or placed in Berms shall be loaded and hauled to the disposal site designated by the Forest Service.

3.3 Roadway backslope or Berm shall not be undercut.

SPECIFICATION T-803 SURFACE BLADING

DESCRIPTION

1.1 Surface blading is keeping a native or aggregate Roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the Crown, Inslope or Outslope of the Traveled Way, Turnouts, and Shoulder; repairing Berms; blending approach road intersections; and cleaning bridge decks, Drainage Dips, and Lead-off Ditches.

REQUIREMENTS

3.1 Surface blading shall be performed before, during, and after Purchaser's use as often as necessary to facilitate traffic and proper drainage.

3.2 The surface blading shall preserve the existing cross-section. Surface irregularities shall be eliminated and the surface left in a free-draining state and to a smoothness needed to facilitate traffic. Surface Material which has been displaced to the Shoulders or Turnouts shall be returned to the Traveled Way. The blading operation shall be conducted to prevent the loss of surface Material and to provide for a thorough mixing of the Material being worked.

3.3 Water, taken from Water Sources designated on Sale Area Map, shall be applied during blading if sufficient moisture is not present to cut, mix, or compact the surface Material.

3.4 On native surfaced roads, Material generated from backslope Sloughing, and ditch cleaning may be blended with the surface Material being worked. On aggregate surfaced roads this Material shall not be blended with Surface or Base Course Material unless agreed otherwise.

3.5 Roadway backslopes or Berms shall not be undercut, nor shall new Berms be established unless agreed otherwise.

Berms shall be repaired by placing Material, as needed to restore the Berm, to reasonably blend with existing line, grade, and cross-section.

3.6 Drainage Dips and Lead-off Ditches shall be cleaned and maintained to reasonably blend with existing line, grade, and cross-section.

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3.7 Intersecting roads shall be bladed for a distance of 50 feet to assure proper blending of the two riding surfaces.

3.8 Rocks or other Material remaining on the Traveled Way after the final pass that are larger than 4 inches in diameter or are larger than the maximum size of imported surfacing shall be removed from the Traveled Way. Unless otherwise designated by the Forest Service, the oversized Material shall be disposed of by sidecasting. Sidecasting into streams, lakes, or water courses will not be permitted.

3.9 Material resulting from work under this specification shall not remain on or in structures, such as Culverts, overside drains, cattleguards, ditches, Drainage Dips, and the like.

3.10 Material resulting from work under this specification, plus any accumulated debris, shall be removed from bridge decks and the deck drains opened.

SPECIFICATION T-804 SURFACING REPAIR

DESCRIPTION

1.1 Surfacing repair is repairing potholes or small soft areas in the Traveled Way. It includes area preparation and furnishing and placing all necessary Materials, and other work necessary to repair the surface.

MATERIALS

2.1 Material used in the repair of soft areas on aggregate or native surfaced roads may be acquired from approved commercial sources, designated Forest Service Borrow areas, or Borrow sources agreed to. The quality and quantity of the imported Material used in the repair will be limited to that needed to provide a stable Traveled Way for hauling and to minimize damage to the road and adjacent resources. The quantity of imported surface repair Material used in the appraisal estimate will be shown on Road Maintenance Plan. However, the magnitude of the work may vary depending on Purchaser's hauling schedule and ground conditions.

2.2 Material used in the repair of bituminous pavements may be acquired from local commercial sources. If a mixing table is required, the location shall be approved by the Forest Service. The bituminous mixture to be used by the Purchaser shall be approved by the Forest Service. The Purchaser's share of the quantity of bituminous mixture used in the appraisal estimate will be shown on Road Maintenance Plan. However, Purchaser's share of the work may vary depending on Purchaser's hauling schedule, ground conditions, other traffic, etc.

REQUIREMENTS

3.1 Work under this specification shall be performed in a timely manner to reduce further deterioration of the Traveled Way.

3.2 Soft spots on aggregate or native surfaces shall be repaired by placing the imported Surface Course on top of the soft spot. Layers of imported Material shall be placed until a firm surface is produced.

3.3 Bituminous Pavement Repairs. The areas to receive bituminous pavement repairs will be marked on the road surface by the Forest Service just prior to Purchaser performing the work.

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3.4 Potholes (deep patch). Surface Course and Base Course Materials shall be excavated to a depth necessary to reach firm, suitable Material. The minimum depth of excavation shall be 2 inches and the maximum depth of excavation shall be to the top of the Subgrade.

The edges of the prepared hole shall be extended to form a vertical face in unfractured asphalt surfacing. The prepared hole shall generally be circular or rectangular in shape, dry, and cleaned of all loose Material.

Prepared potholes shall be patched or barricaded immediately.

The faces of the prepared hole shall be tacked with a slow-setting emulsified asphalt.

The bituminous mixture shall be placed in layers not exceeding a compacted depth of 2 inches. Each layer shall be compacted thoroughly with hand or mechanical tampers or rollers. Compaction shall not be done with equipment wheels.

Upon completion, the compacted patch in the pothole shall be flush, with a tolerance or approximately $\frac{1}{4}$ inch to $\frac{1}{2}$ inch above the level of the adjacent pavement.

3.5 Skin Patches. Bituminous mixture shall be distributed uniformly with feathered edges in layers not to exceed 2 inches compacted depth. When multiple layers are ordered, joints shall be offset at least 6 inches between layers.

Each layer shall be compacted by two passes with a 7-10 ton steel roller or comparable vibratory roller.

3.6 Asphalt Berm. Damaged segments of Berm shall be removed and the exposed ends beveled at approximately 45 degrees from vertical. The Berm foundation shall be cleaned and patched as necessary. The foundation and joining surfaces shall be coated with a slow-setting emulsified asphalt. Asphalt mix shall be placed and compacted to conform with the shape and alignment of the undamaged segment.

3.7 Disposal. All Materials removed from potholes, patches, and Berms shall be disposed of at disposal sites designated by the Forest Service.

SPECIFICATION T-805 DRAINAGE STRUCTURES

DESCRIPTION

1.1 This work consists of maintaining Drainage Structures and related items such as inlet and outlet channels, existing riprap, trash racks, and dropinlets.

MATERIALS

2.1 All Materials used in the maintenance of Drainage Structures shall conform by type and specification to the Material in the structure being maintained.

REQUIREMENTS

3.1 Drainage Structures and related items shall be cleared of all foreign Material which has been deposited above the bottom of the structure and all vegetative growth which interferes with the flow pattern. Material removed that cannot be incorporated into maintenance work shall be hauled to a disposal site designated by the Forest Service.

3.2 If outlet or inlet riprap was installed by Purchaser as a construction item or existed prior to Purchaser's haul, it shall be maintained in good condition including the replacement of riprap if necessary to previous line, grade, and cross-section.

3.3 Perform maintenance to insure the proper functioning of the head walls, aprons, inlet assemblies, overside drains, riprap, trash racks, and other facilities related to the Drainage Structure.

SPECIFICATION T-806 DUST ABATEMENT

DESCRIPTION

1.1 This work shall consist of preparing Traveled Way and furnishing and applying Materials to abate dust.

MATERIALS

2.1 The roads requiring dust abatement, type of dust abatement Material to be used, the rates of application, and frequency of applications will be shown on Dust Abatement Plan (C5.31#). The Dust Abatement Plan may be changed by written Agreement.

2.2 Water. The locations of Water Sources are shown on Sale Area Map.

2.3 Dust abatement Materials shall meet the requirements of the following subsections of Forest Service Specifications for Construction of Roads and Bridges or attached Special Project Specifications.

Emulsified Asphalt	702
Blotter Material	703.12
Magnesium or Calcium Chloride Brine	723.01
Calcium Chloride Flake	723.02
Lignin Sulfonate	723.03

2.4 Testing of Materials. Certification and sampling of bituminous Materials lignin sulfonate, and magnesium chloride shall be in accordance with subsections 105.04 or 723.04 of Forest Service Specifications for Construction of Roads and Bridges.

REQUIREMENTS

3.1 General. Dust abatement Materials shall be applied to the road surface as necessary to control road surface loss, provide for road user safety, and minimize damage to adjacent resources.

3.2 Compaction. When the methods listed below specify compaction, Traveled Way shall be compacted by an 8 to 10 ton pneumatic, steel-wheeled or equivalent vibrating roller making 2 passes over the full Traveled Way and Shoulder width, unless compaction is not required on the Dust Abatement Plan (C5.31#).

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3.3 Preparation to Dust Abatement Materials Other Than Water. The following applies to all methods of preparation:

Bituminous residue shall be scarified and pulverized to produce loosened Material not exceeding 4 inches in greatest dimension.

Traveled Way shall be bladed in accordance with T-803.

Prior to applying DO-6BA, DO-6PA, or DO-8, the top 2 inches of Traveled Way shall contain not less than 80 percent nor more than 120 percent of optimum moisture as determined by AASHTO T-99, Method C. Prior to applying other bituminous Material, Traveled Way shall have a moisture content between 1 and 3 percent. If surface dusting prevents the bituminous Material from penetrating, a light application of water shall be applied just prior to applying the bituminous Material.

Lignin Sulfonate and magnesium chloride shall be applied when the top 1 inch of Traveled Way contains not less than 3 percent moisture, nor more than 120 percent of optimum moisture as determined by AASHTO T-99, Method C.

Moisture content will be determined in accordance with AASHTO T-217 OR T-239.

One or more of the following methods shall be used, as specified in the Dust Abatement Plan (C5.31#).

Method 1. Compact Traveled Way and apply the dust abatement Material.

Method 2. Develop a layer of loose Material approximately 1 inch in depth for the full width of Traveled Way. Apply the dust abatement Material to this loose Material and compact after penetration. If traffic makes maintenance of the loose Material difficult, 1 inch of the Material may be bladed into a windrow along the Shoulder. The specified moisture content shall be maintained in the windrow and the top 1 inch of Traveled Way. The windrow shall be bladed to a uniform Material. When the dust abatement Material has penetrated, Traveled Way shall be compacted.

Method 3. Blade 1 inch of Material from Traveled Way into a windrow along the Shoulder. Maintain the specified moisture content in the windrow and the top inch of Traveled Way. Apply half the dust abatement Material. When the dust abatement Material has penetrated, the windrow shall be bladed to a uniform depth across dust abatement Traveled Way, and the remaining dust abatement Material shall be applied. Traveled Way shall be compacted.

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Method 4. Develop a layer of loose Material approximately 2 inches in depth for the full width of Traveled Way. Apply half the dust abatement Material to the loose Material. Blade the top 2 inches into a windrow along the Shoulder. Apply the remaining dust abatement Material to Traveled Way and the Berm. Spread the Berm evenly across Traveled Way and compact.

3.4 Preparation for Dust Abatement with Water. Traveled Way shall be prepared in accordance with Specification T-803 Surface Blading when required.

3.5 Application Tolerance. Dust abatement Materials other than water shall be applied within 0.05 gallons per square yard of the rate specified.

3.6 Mixing Requirements. DO-6BA, DO-6PA, and DO-8 shall be thoroughly circulated in the distributor within 1 hour of application.

3.7 Weather Limitations. Dust abatement Materials shall not be applied when it is raining.

Bituminous Material shall be applied when the surface temperature of Traveled Way is 50 degrees Fahrenheit or higher.

Lignin sulfonate and magnesium chloride shall be applied when the atmospheric temperature is 40 degrees Fahrenheit or higher.

3.8 Blotter Material. Blotter Material shall be spread in a sufficient quantity to prevent tire pickup.

SPECIFICATION T-807 ROADWAY VEGETATION

DESCRIPTION

1.1 This work consists of cutting and disposing of all vegetative growth, including trees on roadway surfaces and roadsides that reduce sight distance and operational capability of the road within the clearing limits as described in the Road Maintenance Plan.

REQUIREMENTS

3.1 Cut brush, trees and other vegetative matter within the clearing limits to a maximum height of 6 inches above the ground surface or obstruction such as rocks or existing stumps which reduces sight distance, impedes vehicular travel or interferes with road maintenance operations, such as surface blading and ditch and culvert cleaning shall be removed. Timber meeting utilization standards shall be cut in appropriate lengths and decked along the Roadside in locations where the Traveled Way or sight distances will not be impaired.

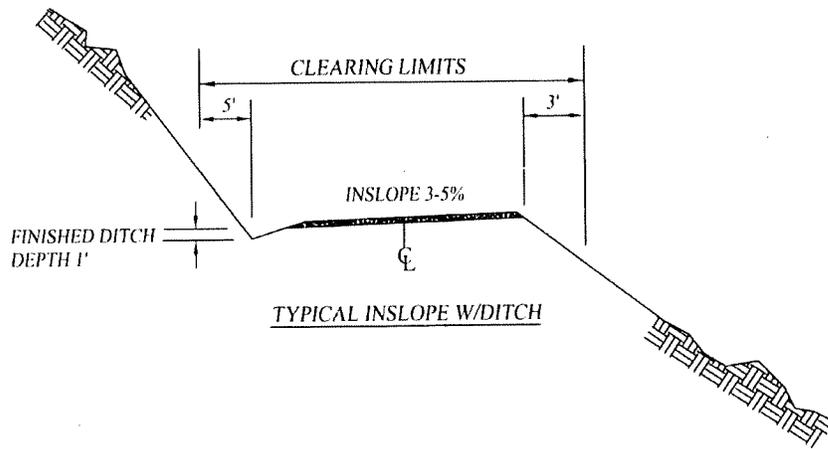
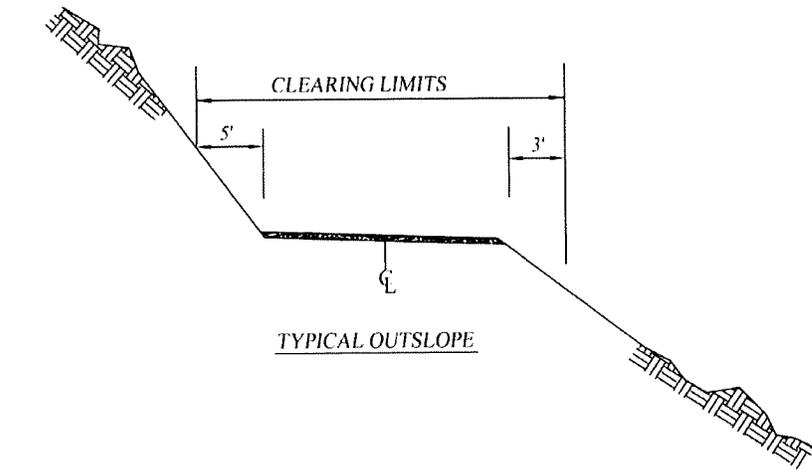
3.2 Any items to remain will be Designated by the Forest Service.

3.3 Trim tree branches that extend over the road surface and shoulders to attain a clear height of 14 feet. When trees are limbed, cut limbs within 4 inches or less of the trunk.. If required, remove other branches to present a balanced appearance.

3.4 Work may be performed either by hand or mechanically unless specifically shown in the Road Maintenance Plan. Self-propelled equipment is not allowed on cut and fill slopes or in ditches.

3.5 Vegetative matter and nonmerchantable timber cut from the Clearing Limits shall be treated by the specified method as required by C6.7# - SLASH TREATMENT.

T-807 DIAGRAMS AND SPECIFICATIONS FOR ROADWAY VEGETATION



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SPECIFICATION T-808 MISCELLANEOUS STRUCTURES

DESCRIPTION

1.1 Maintenance of miscellaneous structures includes cattleguards, gates, and other similar structures that have been previously installed to insure safe and efficient operation of the road.

MATERIALS

2.1 Any Materials needed in the maintenance of miscellaneous structures shall be similar in type and quality to the Material in the structure being maintained.

REQUIREMENTS

3.1 Cattleguards. Loose rails shall be welded or bolted back in place.

Excess Material carried into the cattleguard shall be removed when drainage is blocked or when it reaches 6 inches from the bottom of the cattleguard frame. Drainage into and from the cattleguard shall be kept open.

3.2 Gates. Gates shall be kept in good repair and made to swing easily. Hinges or latches shall be repaired if not operating properly.

Brush and debris shall be removed from within the swinging radius.

SPECIFICATION T-809 WATERBARS

DESCRIPTION

1.1 This work consists of installing or removing Waterbars in the Roadbed.

REQUIREMENTS

3.1 Waterbars shall be installed on roads shown on Road Maintenance Plan in accordance with the attached drawings and at locations designated or staked on the ground.

All Material excavated shall be used in the installation of the Waterbar. Bermed Material shall be compacted by operating heavy equipment over the length and width of the Berm.

3.2 Waterbars shall be removed on roads shown on Road Maintenance Plan by blading the Berm into the adjacent depression to form a smooth transition along the Traveled Way. The length and width of the fill Material shall be compacted by the equipment performing the work.

3.3 Waterbars may be required to be installed between seasons of use and then removed when haul is resumed. Waterbar installation may also be required when use of a road has been completed.

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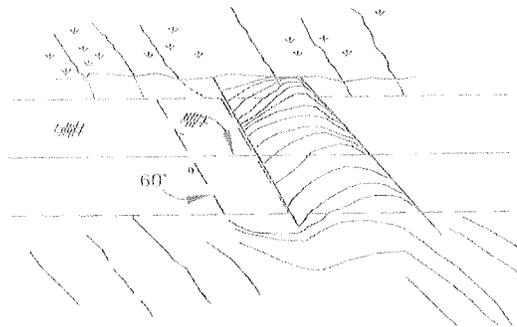
F-809 - Diagrams and Specifications for Machine Waterbar Construction

Waterbars are designated by colored flogging

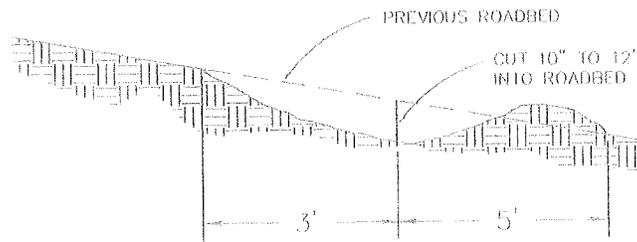
SPECIFICATIONS

1. Waterbars shall slope diagonally out and downgrade at a minimum angle of 60 degrees with the centerline of the road. The waterbar shall be tied securely to the upper bank.
2. The waterbar shall be bulldozed or cut with a grader blade into the roadbed to a depth of at least six inches at the upper road bank and sloped to a depth of at least 12 inches on the road shoulder.

DIAGRAMS



VIEW OF COMPLETED WATERBAR



CROSS SECTION OF WATERBAR

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SPECIFICATION T-810 BARRIERS

DESCRIPTION

1.1 This work shall consist of furnishing, installing, or removing barriers. Gates are not included.

MATERIALS

2.1 Materials for barriers shall meet the requirements as shown on attached drawings.

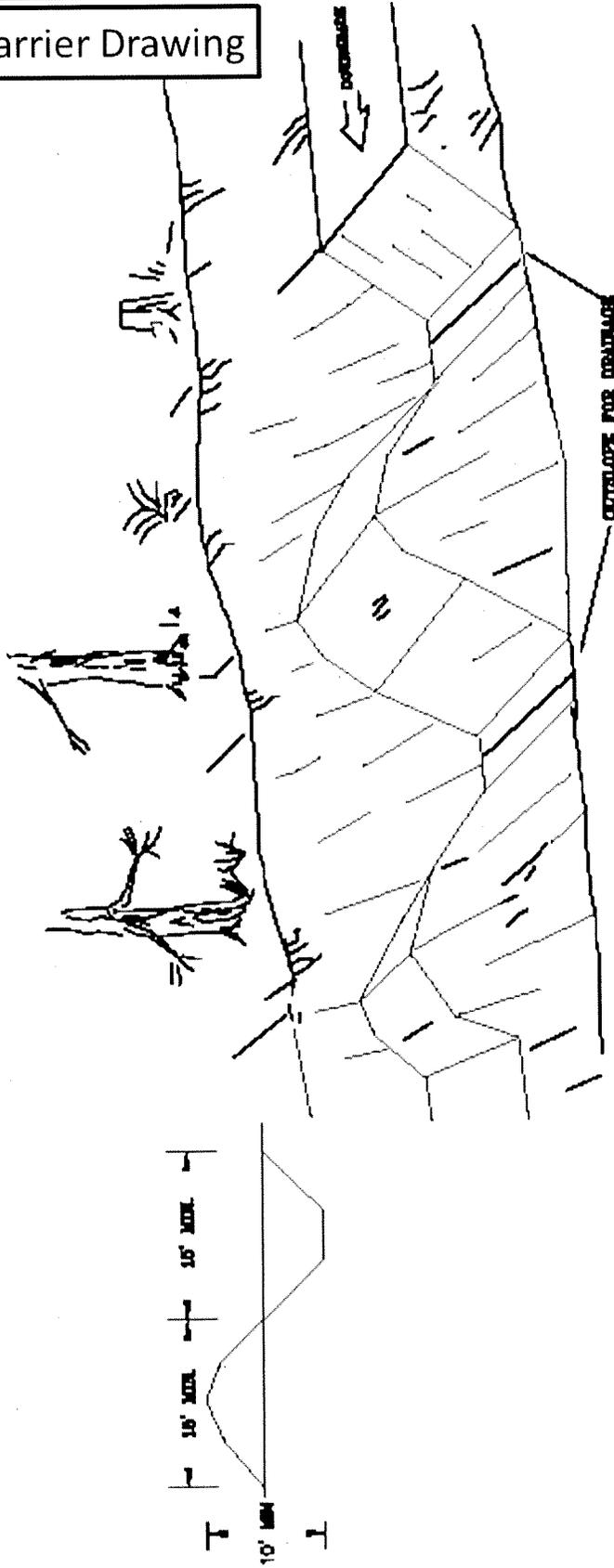
REQUIREMENTS

3.1 Barriers shall be installed in accordance with the attached drawings.

The location of barriers to be removed or installed is shown on Sale Area Map. Installation or removal may occur as often as road use is terminated and resumed.

T-810 Barrier Drawing

- NOTE :
- Earthen Barrier shall be constructed Full Width of existing road bed.
 - Outlet shall be clear of any material so as to drain unobstructed.
 - Construct a minimum of two (2) Earthen Ditches per Barrier.



U.S. FOREST SERVICE
EARTHEN BARRIER
DETAIL

EARTHEN BARRIER DETAIL

SPECIFICATION T-811 SURFACE TREATMENT

DESCRIPTION

1.1 This work shall consist of applying a chip seal, sand seal, or fog seal to the Traveled Way.

Chip seals may consist of single or double applications of bituminous Material and cover aggregate.

MATERIALS

2.1 The roads requiring surface treatments, the type of seal coat to be applied, the rate of application, and type and grade of bituminous Material, and the rate of application and grading of cover aggregate will be shown on Surface Treatment Plan (C5.31#).

2.2 Emulsions used for fog seals shall be diluted with an equal amount of water and shall be applied at the diluted application rate shown on Surface Treatment Plan (C5.31#).

2.3 Seal coat Materials shall meet the requirements of the following subsections of Forest Service Specifications for Construction of Roads and Bridges or attached Special Project Specifications:

Bituminous Materials	
Asphalt Cement	702.01
Liquid Asphalts	702.02
Emulsified Asphalt	702.03
Application Temperatures	702.04
Cover Aggregate	703.11
Blotter Material	703.12
Water for Diluting	725.01

2.4 The cover aggregate shall be surface damp at the time of application when using emulsified asphalt and dry when using an asphalt cement or liquid asphalt. Excess water on the aggregate surface will not be permitted.

MAINTENANCE REQUIREMENTS

3.1 Traffic. Traffic shall be maintained in accordance with C6.333#.

3.2 Weather Limitations. Fog seal and chip seal shall not be applied when the weather is foggy or rainy.

Seal coats requiring cover aggregate shall not be applied when the temperature of the surface being treated is below 70 degrees Fahrenheit in the shade.

Fog seal coats shall not be applied when the surface temperature is below 40 degrees Fahrenheit in the shade.

3.3 Equipment. The following equipment or its equivalent shall be used:

A distributor truck equipped to spread the Material uniformly at the designated rate, within the temperature range specified and within 0.04 gallons per square yard of the rate specified. The distributor shall be equipped with a thermometer and a hand hose with spray nozzle.

A rotary power broom and/or blower.

When cover aggregates are applied: A pneumatic tire roller, 8-ton minimum weight with all tires equally inflated to a pressure of at least 90 pounds per square inch. Rollers shall be equipped with devices for applying water to the tires.

Self-propelled aggregate spreader supported by at least four wheels equipped with pneumatic tires on two axles, situated so that at no time will the tires contact the uncovered bituminous Materials. The aggregate spreader shall be equipped with positive controls so that the required amount of Materials will be deposited uniformly over the full width.

Trucks with spreading attachments shall not be used.

3.4 Preparation of Surface. Immediately before applying the bituminous Material, the surface to be sealed shall be cleaned of all foreign and loose Material.

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3.5 Application of Bituminous Material. Bituminous Material shall be applied in a uniform, continuous spread. The distributor shall be moving forward at proper application speed at the time the spray bar is opened. Skipped areas or deficiencies shall be corrected prior to the application of cover aggregate.

The spread of bituminous Material shall not be more than 6 inches wider than the width to be covered by the cover aggregate. Operations shall not proceed if the bituminous Materials are allowed to cool, set up, dry, or otherwise impair retention of cover aggregate.

Fog seal shall be allowed to penetrate and dry before traffic is permitted on the sealed portion.

The surfaces of structures and trees adjacent to the area being treated shall be protected to prevent their being spattered or marred.

3.6 Application of Cover Aggregate and Blotter. Immediately following the application of the bituminous Material, cover aggregate shall be spread at the specified rate. Joints between adjacent applications of cover aggregate shall be approximately in the center of two-lane roads.

The aggregate spreader shall not be operated at speeds which cause the aggregate to roll over after striking the bituminous Material. The cut-off of aggregate shall be complete, and any excess aggregate shall be removed from the surface prior to resuming operations. Immediately after the cover aggregate has been spread, any piles, ridges, and uneven distribution shall be corrected.

Cover aggregate may be applied by hand in areas inaccessible to spreading equipment.

Rolling shall begin immediately after spreading the cover aggregate and shall consist of a minimum of two complete coverages.

After rolling, traffic shall be controlled to a maximum speed of 15 miles per hour for a period of 4 hours.

The day following the final application of cover aggregate, any concentrations of loose cover aggregate shall be redistributed without disturbing the embedded aggregate. Four days after the final application of cover aggregate, all excess cover aggregate shall be removed. During this period, any bituminous Material that comes to the surface shall be covered with additional cover aggregate or approved blotter Material.

3.7 Blotter Material for fog seals shall be spread in sufficient quantity to prevent tire pickup.

C5.32# - ROAD MAINTENANCE DEPOSIT SCHEDULE (08/2012)

Other provisions herein notwithstanding, when Forest Service requests payment in lieu of Purchaser's performance of road maintenance, Purchaser shall make Required Deposits (16 USC 537) for current and/or deferred road maintenance. Such deposits are based on the estimated volume and distance hauled and Purchaser's commensurate use of each road listed in the Road Maintenance Plan in C5.31#.

Purchaser and Forest Service may agree in writing on adjustment of such rates. If Purchaser uses roads under jurisdiction of Forest Service other than those listed in the Road Maintenance Plan, Forest Service shall establish rates commensurate with Purchaser's use of such roads.

The Required Deposits for Forest Service work in lieu of Purchaser performance are N/A per Ton for recurrent maintenance, and \$.09 per Ton for deferred maintenance.

The following table lists who Purchaser will make deposits for road maintenance to, and the rate per unit of measure of the deposit. The Road Maintenance Agreement is available for inspection at the Forest Supervisor's office.

<u>Deposit Made To</u>	<u>Rate</u>	<u>Unit of Measure</u>
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N/A

C5.34# - OBLITERATION OF TEMPORARY ROADS, SKID TRAILS AND LANDINGS (03/2002)

Unless otherwise agreed in writing, temporary roads, skid trails and landings associated with the cutting unit(s) listed in the following table shall be obliterated using the method described below:

See Obliteration Table

C5.34# – OBLITERATION OF TEMPORARY ROADS, SKID TRAILS AND LANDINGS. (3/02)

Cutting Unit(s)	Type of Facility	Closure Method
All	New Temp roads, New Skid trails, & New landings	<p>Obliterate all landings, skid trails, and temporary roads used in project implementation within one year following harvest activities. If obliteration does not occur prior to seasonal runoff then winterization (e.g. waterbars) is required within 15 days of last turn skid.</p> <p>Where soil effects do not exceed unacceptable soil disturbance, active decompaction, recontouring, or topsoil recovery is not required but ground cover requirements (as defined below) need to be met.</p> <p>Unacceptable soil disturbance (final determination to be made by Forest Service) includes the following indicators:</p> <ul style="list-style-type: none"> • Rutting: defined ruts with continuous displaced mineral topsoil berms greater than 4 inches in height and longer than ten feet • Topsoil displacement: surface mineral soil displaced at a continuous greater than 4-inch depth on a 10 square foot area • Compaction: greater than 4-inch depth of compaction, indicated by strong platy or massive structure in mineral soil <p>Where operationally feasible, constructed skid trails, landings and temporary road surfaces should be decompacted to full depth of compaction and recontoured to the natural slope profile. Decompaction techniques would emphasize slight lifting and fracturing, not plowing or mixing of subsoil material with topsoil.</p> <p>Nonconstructed skid trails would be fully decompacted on the entire width if compacted (typically >4 in. depth of compaction with strong platy, or massive structure). Typically, this is a minimum distance of 100-200 feet from landings and primary skid trails. Exceptions are as follows:</p> <ul style="list-style-type: none"> • If impacts are mainly limited to track ruts and the centerline of the skid trail is not compacted and still vegetated, subsoil only within defined track ruts if they are compacted to >4-inch depth. <p>Decompaction should be restricted to areas where roots from trees greater than 8 inches diameter at breast height would not be fractured. Typically, this is outside of the tree drip line.</p>

		<p>Soil Displacement Rehabilitation When treatment activities displace a continuous >4 inch depth of mineral topsoil on >10 sq. ft area OR results in defined rut(s) with continuous displaced mineral topsoil berms >4 inches in height and longer than 10 feet, reclaim disturbed soil by pulling displaced mineral topsoil berms back to original configuration. This work may be completed by hand or with an excavator/feller buncher/off road jammer on slopes up to 40%. Otherwise this work needs to be completed by hand on slopes >40%.</p> <p>Soil Cover Pull slash, fine and coarse woody debris to achieve 50% to 80% ground cover. Spread material evenly over the entire trail/road. Excessive material shall be evenly scattered into the unit from the trail, temp road or landing. Material (limbs, tops, cull, etc.) should be transported back into the units during harvest operations to meet ground cover requirements.</p>
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CS.35# - CLOSURE OF TEMPORARY ROADS (09/2001)

Unless otherwise agreed to in writing, temporary roads associated with the cutting unit(s) listed in the following table shall be closed using the closure method described.

See Temporary Road Closure Table

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C5.35# - CLOSURE OF TEMPORARY ROADS . (9/01)

Temporary Road Closure Table	
Unit	Closure Method
51	The first 100-200 feet need to be fully closed by obliteration per C5.34#.
56	

C5.36# - SNOW REMOVAL (09/2001)

Snow removal shall be done in a manner to preserve and protect the roads to insure safe and efficient transportation and to prevent unacceptable erosion damage to roads, streams, and adjacent lands.

A. Description. Snow removal work by Purchaser shall include:

1. Removal of snow from entire road surface width including turnouts.
2. Removal of snow slides, minor earth slides, fallen timber and boulders that obstruct normal road surface width including turnouts.
3. Maintain drainage so that the drainage system will function efficiently.

B. Performance. All items of snow removal shall be done currently as necessary to insure safe, efficient transportation. Work shall be done in accordance with the following minimum standards of performance.

1. Removal of material. All debris, except snow and ice, that is removed from the road surface and ditches shall be deposited away from stream channels at agreed locations.
2. During snow removal operations, banks shall not be undercut nor shall gravel or other selected surfacing material be bladed off the roadway surface.
3. Ditches and culverts shall be kept functional during and following roadway use.
4. Snow berms shall not be left on the road surface. Berms left on the shoulder of road shall be removed and/or drainage holes shall be opened and maintained. Drainage holes shall be spaced as required to obtain satisfactory surface drainage without discharge on erodible fills.
5. Dozers and skidders shall not be used to plow snow on system roads without written approval of Forest Service. Upon approval, dozers and skidders must be equipped with shoes or runners to keep the plow blade a minimum of 2-4 inches above the road surface unless specifically removed from the requirements in writing.
6. Snow must not be removed to the road surface. A minimum 2-4 inch depth must be left to protect the roadway.
7. Purchaser's damage from, or as a result of, snow removal shall be restored in a timely manner.

C5.41# - CLOSURE TO USE BY OTHERS (04/2004)

A. Closure of Roads During Period of Contract. Unless otherwise agreed in writing between Purchaser and Forest Service, Purchaser shall within 15 days of receipt of notice from Forest Service, install gates listed below and close gates on roads designated "To Be Closed" on Sale Area Map and listed below to effectively block access behind such gates to vehicle traffic except that constituting official use. Installation of gates shall follow closure details attached hereto and made a part hereof.

Official vehicle traffic shall constitute that use by Purchaser and his employees when engaged in timber sale activities. It shall also include administrative traffic by Forest Service, and other landowners for the administration of their lands. Purchaser will close gates as directed by Forest Service at the completion of daily activities or close gates after passage of each vehicle. Forest Service will monitor and administer closure activities.

See Gate Location(s) Table

B. Closure of Roads at End of Purchaser's Use. Unless otherwise agreed in writing between Purchaser and Forest Service, upon completion of use, Purchaser shall effectively close to public use the following roads designated "To Be Closed" on Sale Area Map and listed below. As an element of final road maintenance and environmental or resource protection, the designated closure shall be accomplished by using the methods required for each road as described below:

Installation of barricades, which may include earth berms, logs, timber, rock, metal railing, etc., in accordance with details attached hereto and made a part hereof, including the proper barricade and closure signing.

Scarify, seed, and fertilize these travel ways full width as described in C6.601#. Recontour or reshape cut or fill slopes in accordance with details attached hereto and made a part hereof; seed, scarify, and fertilize as described under C6.601#; pull existing drainage structures; haul designated culverts to approved stockpile site, or other work needed to obliterate or put road to bed as described in attached road logs or details.

Construct cross ditches by cutting a dip at least six (6) inches deep in the road surface and mounding the excavated material along the downgrade edge of the dip. Dips shall be cut at a sufficient angle so that they will drain to the outside of the road. They shall cross the entire width of the roadbed and be constructed at the following spacing:

See Water Dip Specifications Table

See Close and Lock Existing Gate(s) Table

During the life of this contract, Purchaser is authorized to install temporary barricades on the roads designated "To Be Closed." Gates with adequate and protected locks may be considered a temporary barricade. Temporary barricades shall be installed so that they may be readily opened by Purchaser or Forest Service for access to Sale Area in case of fire or other emergency. Official vehicle traffic shall also include administrative traffic by Forest Service and other landowners for the administration of their lands. Purchaser shall provide and post approved signs as authorized by Forest Service.

C. Purchaser's Operations in areas otherwise closed to motorized vehicles. During the period October 1 to November 6 when Purchaser's Operations are in areas otherwise closed to motorized vehicles, Purchaser shall not be permitted to hunt, transport hunters, discharge firearms, or transport big game animals with vehicles within the closed areas.

C5.41# - CLOSURE TO USE BY OTHERS. (4/04)

Gate Location(s)				
Road Number	Location	Gate Furnished By	Gate Installed By	In Place
50458	T19N, R2E, Section 23	N/A	N/A	Yes
50812	T19N, R2E, Section 23	N/A	N/A	Yes

Water Dip Specifications Table	
Percent Grade	Maximum Spacing
<6%	250'
6-8%	200'
8-12%	150'
>12%	100'

Close and Lock Existing Gate(s) Table				
Road Number	Location	Closure Method	Furnished By	In Place
50458	T19N, R2E, Section 23	Gate	Forest Service	Yes
50812	T19N, R2E, Section 23	Gate	Forest Service	Yes
51404	T19N, R2E, Section 23	Gate	Purchaser	No
51404	T19N, R2E, Section 14	Gate	Purchaser	No

C6.24# - SITE SPECIFIC PROTECTION MEASURES (04/2004)

Special protection measures needed to protect known areas identified on Sale Area Map or on the ground include:

Cultural Resource Protection Measures: Archeological site locations and mitigation measures will be disclosed and discussed at the pre-work meeting.

Wildlife and Botanical Protection Measures: Water drafting sites need approval in advance by the Forest Service. Screen opening size on the draft hose must be 3/32" or smaller. In addition, velocity at the intake must not be so great that fish could be trapped against the screen while drafting. This can be accomplished by pumping from a screened submerged 5 gallon bucket or similar apparatus that provides a large surface area around the footvalve or other method as approved by the Forest Service.

Cave Resource Protection Measures: None known at this time.

C6.312# - SALE OPERATION RESTRICTIONS (04/2004)

Unless otherwise agreed in writing, sale operations will be restricted as listed below:

See Sale Operation Restrictions Table

C6.312# - SALE OPERATION RESTRICTIONS. (4/04)

Sale Operation Restriction Table	
Cutting Unit	Restriction & Purpose
All	Periodic management activity restrictions, as determined by the Forest Service, may be applied from May 1 to July 15 if calving/fawning big game are present.
All	All activities shall cease if a previously unknown Threatened, Endangered, Candidate, Proposed, Sensitive, or Management Indicator Wildlife, Fish, or Botanical Species ¹ is found. This includes nests and dens. Activities may only resume upon written approval by the FOREST SERVICE and may require additional mitigation.
All	If a new northern goshawk nest is located, onsite activities shall cease until a survey can determine if the nest is active. If the nest is active, operations in those 30 acres will be halted until the end of the nesting season (March 1 to September 30). Operations may resume earlier than September 30 if it is determined that the birds are no longer present.
All	If a new Great gray owl nesting sites is located it may require protecting activity centers to retain nesting and rearing habitat.
All	Removal of forest products not included in A2 by Purchaser and subcontractors on any temporary road or other road not open for public use is prohibited.
All	Purchaser shall contact watermaster for each district prior to drafting water.
<p>1 – The species with the highest probability include: Flammulated owls, White-headed woodpeckers, pileated woodpeckers, Northern goshawk, great gray owl, sierra sanicle, swamp onion. Potential restrictions for these species may include timing, nest/burrow buffers, avoidance, and alteration of unit boundaries.</p>	

C6.341 - PREVENTION OF OIL SPILLS (IDAHO FORESTS) (05/2006)

If Purchaser maintains storage facilities for petroleum or petroleum products on Sale Area, Purchaser shall take appropriate preventive measures to ensure that any spill of such petroleum or petroleum products does not enter any stream or other waters of the United States or any of the individual States.

Petroleum or petroleum product storage containers with capacities of more than 200 gallons, stationary or mobile, shall be located no closer than 100 feet from stream, watercourse, or area of open water. Dikes, berms, or embankments shall be constructed to contain at least 110% of the volume of petroleum products stored within the containers. Diked areas shall be sufficiently impervious and of adequate capacity to contain spilled petroleum products.

If the total petroleum or petroleum products storage exceeds 1,320 gallons in containers of 55 gallons or greater, Purchaser shall prepare a Spill Prevention Control and Countermeasures (SPCC) Plan. Such plan shall meet applicable EPA requirements (40CFR 112), including certification by a registered professional engineer.

Purchaser shall notify Contracting Officer and appropriate agencies of all reportable (40CFR 110) spills of petroleum or petroleum products on or in the vicinity of Sale Area that are caused by Purchaser's employees, agents, contractors, subcontractors, or their employees or agents, directly or indirectly, as a result of Purchaser's operations. Purchaser will take whatever initial action that may be safely accomplished to contain all spills.

C6.411# - FELLING AND BUCKING (SPECIAL OBJECTIVES) (11/1998)

Unless otherwise agreed in writing, silvicultural prescriptions and land management objectives shall be conducted and accomplished by the following requirements, methods and procedures:

See Felling and Bucking Table

C6.411# - FELLING AND BUCKING (SPECIAL OBJECTIVES). (11/98)

Cutting Unit(s)	Special Objectives
All Tractor, Cable, and Off-Road Jammer Units	<p>Mechanical felling operations will only be considered when unacceptable soil rutting, displacement or compaction will not occur.</p> <p>Mechanized falling equipment will not be allowed to operate if soils are too wet. Soil is too wet for falling operations when a 1 to 2 inch diameter ball of mineral soil sampled at 4 to 6 inches depth can be molded with hand pressure by 6 directional squeezes and stays together for repeated tosses 1 to 2 feet in the air-final determination to be made by Forest Service.</p> <p>As determined by the Forest Service, when soil is sufficiently frozen or snow-covered mechanized falling equipment may be allowed. Typically, these conditions are as follows:</p> <ul style="list-style-type: none"> • Minimum 4-inch depth of frozen soil with no snow OR • Minimum 2-inch depth of frozen soil with 6 inches of machine packed snow OR • No frozen soil and minimum of 10 inches of machine packed snow <p>Mechanized falling equipment may be used on slopes less than or equal to 35%.</p> <p>Mechanized falling equipment is not permitted in RCAs.</p>
61, 65	Mechanized falling equipment is allowed to operate on slopes greater than 35%.
70	Mechanical falling equipment will be allowed to operate on slopes greater than 35%. In southeast corner of unit minimize the number of machine passes and pick cutting trails based on the lowest side slope angles.
All	Hand felling will be required in areas where mechanized falling equipment is restricted from operating.
All units except 52 and 54	Felled trees in jammer/off-road portions of units will be topped in the woods to facilitate leaving top. These tops shall be lopped within 2 feet of the ground.
All	Leave dead standing (this overrides C2.356#) unless there is a need for felling for safety.

C6.42# - SKIDDING AND YARDING (SPECIAL OBJECTIVES) (11/1998)

Unless otherwise agreed in writing, silvicultural prescriptions and land management objectives shall be conducted and accomplished by the following requirements, methods and procedures

See Skidding and Yarding Table

C6.42# - SKIDDING AND YARDING (SPECIAL OBJECTIVES). (11/98)

Cutting Unit(s)	Special Objectives
All	Approval of ground-based equipment operations will only be considered when unacceptable soil rutting, displacement or compaction will not occur.
All	Any dead material skid to the landing will be required to be skid back into the forest a distance greater than 300' from all roads.
All	No mechanized equipment, new skid trails, temporary roads, or landings would be allowed within RCAs unless evaluated and approved by the Forest Service.
All	Design and designate skid trail systems to minimize new soil disturbance. Give preference to reusing and rehabilitating existing skid trails.
All	<p>Skidding and Yarding will not be allowed to operate if soils are too wet. Soil is too wet for skidding and yarding operations when a 1 to 2 inch diameter ball of mineral soil sampled at 4 to 6 inches depth can be molded with hand pressure by 6 directional squeezes and stays together for repeated tosses 1 to 2 feet in the air-final determination to be made by Forest Service.</p> <p>When soil is too wet as determined by the above process, skidding/jammer/off road jammer may be allowed with Forest Service approval on primary, designated trails and landings.</p> <p>As determined by the Forest Service, when soil is sufficiently frozen or snow-covered heavy equipment use may be allowed. Typically, these conditions are as follows:</p> <ul style="list-style-type: none"> • Minimum 4-inch depth of frozen soil with no snow OR • Minimum 2-inch depth of frozen soil with 6 inches of machine packed snow OR • No frozen soil and minimum of 10 inches of machine packed snow
All	Construction (i.e. benching) of excavated skid trails would be allowed on hillslopes up to 45% slope. Constructed trails should not exceed 30% grade, except for short distances. Where feasible, construct trails an average minimum distance of 200 feet between constructed trails except where trails converge. Minimize the width and depth of excavation as much as possible. Locations must be designated and pre-approved prior to felling.
All	Non constructed trails would be spaced an average minimum distance of 100 feet, where feasible.
52, 54 and portions of 51, 53, 55-57, 59,	<p>Tractor Skidding</p> <p>All ground-based skidding/yarding operations shall be restricted to designated skid trails that must be designated by Purchaser and pre-</p>

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61-65, 67, 69, 70	<p>approved by the Forest Service before skidding.</p> <p>Jammers and Off-Road Jammers may also be used in portions of units that are greater than 35% slope or where feller bunchers are restricted, when approved by Forest Service (see requirements below).</p>
51, 53, 55-70	<p>Off-Road Jammer, Jammer: Cable Yarding required. Jammer or pulling line meets requirements. Logs on slopes greater than 35% or where feller bunchers are restricted will be winched to designated skid trail with an off-road jammer. The off-road jammer must be equipped with a skidding line capable of yarding 300 feet, a log-handling boom, and a tracked undercarriage. Tractors may be used for skidding logs to landings on approved designated skid trails.</p> <p>Tractors may also be used for skidding in portions of units that are less than 35% slope, when approved by Forest Service (see skidding tractor requirements above).</p>
61, 65	<p>Ground based equipment will be allowed to operate on slopes greater than 35%.</p>
70	<p>Ground based equipment will be allowed to operate on slopes greater than 35% with preference to reusing existing trails to minimize detrimental disturbance. If skidding off existing trails is on slopes over 35% limit to slopes to 40% or less, keeping lengths as short as possible (150 feet) and minimize the number of machine passes. Avoid machine travel up and down swales and cross swales at the lowest side slope angles.</p>

C6.45# - PROTECTION FROM IPS BUILDUP (11/1998)

Unless permitted in writing by the Forest Service, there shall be no felling or bucking of Ponderosa Pine within Units 58, 62, 63, 64, and 67 on Sale Area Map during the period December 1 to June 30. If written permission is granted, it may be conditioned upon a requirement that the purchaser provide a continuous food chain of green Ponderosa Pine material, logs, and slash during the period July 1 to September 15, following the cutting. Forest Service may allow periodic removal of logs from this chain of green material. Such green material shall be provided from periodic cutting or tree felling operations from Included Timber within the cutting units, or where such material is inadequate or not available, green material may be provided by the thinning of non-included trees within sale area upon approval by the Forest Service. If the Forest Service determines it necessary, it may direct the order and location of cutting to provide the necessary green material.

C6.50# - STREAMSIDE MANAGEMENT ZONES (11/1998)

A Streamside Management Zone (SMZ) is a zone that contains riparian vegetation and other special characteristics. Areas identified as Streamside Management Zones (SMZ's) are shown on the Sale Area Map and designated Protected Streamcourse. Timber designation, conduct of logging, and/or slash treatment may differ in the SMZ from the rest of the unit. Unless otherwise agreed to in writing and notwithstanding the contract requirements otherwise applicable to each cutting unit, the following special requirements apply to the SMZ of the cutting units specified below:

See Streamside Management Zone Table

C6.50# - STREAMSIDE MANAGEMENT ZONES (11-98)

Streamside Management Zone Table	
Cutting Unit (s)	Zone Requirements
All	<p>Streamside Management Zones (SMZs) are defined as the area within:</p> <ul style="list-style-type: none"> - 240-foot slope distance of the high-water mark of perennial streams (a stream that typically maintains year-round surface flow); & - 120 foot slope distance of the high water mark of intermittent streams (a stream that flows only in direct response to precipitation or seasonal run-off and that receives little or no water from springs or other permanent sources; has well-defined channel and banks), springs, seeps, ponds, lakes, reservoirs and/or wetland. <p>No equipment (unless on a system road prism) is permitted within SMZs.</p> <p>No cutting or removal of trees is permitted within SMZs unless the area is part of a SMZ Treatment as described below and displayed on the Activity Map.</p>
All	No refueling or storage of fuels or other toxicants is allowed within SMZs.
All	Unattended equipment shall not be parked within SMZs.
All	SMZs found on the ground but not on the map will be treated the same as those areas described above.
All	No mechanized equipment, temporary roads, new skid trails or landings within SMZs unless evaluated and approved by the Forest Service.
61 & 67	<p>These units have SMZ Treatment areas within their boundaries. There are approximately 7 acres of SMZ Treatment in which harvest of commercial material is permitted. It is preferable that these units be logged over snow when ground conditions remain frozen. SMZ Treatment areas are designated on boundary trees with orange painted X's facing into the unit and a stump mark.</p> <p>Felling and skidding within the SMZ will be limited as described below:</p> <ul style="list-style-type: none"> • Hand felling must be utilized. No feller buncher is permitted. • Skidding/yarding must be completed using an off-road jammer or skyline yarder to winch/cable trees to existing roads or skid trails outside the SMZ.

C6.6# - EROSION PREVENTION AND CONTROL (11/1998)

A. Purchaser shall locate Temporary Roads on locations approved by the Forest Service. Such location shall include the marking of road centerline or grade-line and the setting of such construction stakes as are necessary to provide a suitable basis for economical construction and the protection of National Forest lands.

B. Skidding with tractors within 120 feet of intermittent and for perennial 240 feet of live streams shall not be permitted except in places designated in advance by Forest Service, and in no event shall skid roads be located in live or intermittent streamcourses. Skid trails shall be located high enough out of draws, swales, and valley bottoms to permit diversion of runoff water to natural undisturbed forest ground cover.

C. Prior to periods of accelerated water runoff, especially during the spring runoff and periods of heavy rainfall, Purchaser shall inspect and open culverts and drainage structures, construct special cross ditches for road runoff, and take other reasonable measures needed to prevent soil erosion and siltation of streams.

D. Temporary Road surface width shall be limited to truck bunk width plus four (4) feet, except for needed turnouts which shall not exceed two (2) times the bunk width plus four (4) feet. If shovels or cranes with revolving carriage are used to skid or load, Temporary Road surface width equal to track width plus tail swing shall be permitted.

E. Unless otherwise agreed in writing, Purchaser shall keep erosion control work current with his operations under the sale and in any case not later than 15 days after completion of skidding on each payment unit or cutting unit.

C6.601# - EROSION CONTROL SEEDING (11/1998)

Following completion of skidding and yarding operations in an area, Purchaser shall seed and fertilize all exposed areas of raw soil which has been designated by the Forest Service on skid trails, landings, firebreaks, slides, slumps, Temporary Roads and traveled ways of Specified Roads 51400, 51401, 51402, 51450, 51451, 51452 and 51891 following closure specified in C5.41#.

Soil on areas to be seeded shall be left in a roughened condition favorable to the retention and germination of the seed. Scarification of traveled ways on Specified Roads listed above shall be to a minimum depth of 3 inches and a maximum depth of 6 inches.

Seed and fertilizer shall be spread evenly at the rate of 18 pounds of seed and N/A pounds of fertilizer per acre.

When fertilizer and seed are applied in separate operations, the second operation shall be carried out within 72 hours of the first.

Seeding shall be done during the period June 15 to October 15 and under the above specified conditions unless otherwise approved.

The kinds and amounts of seed to be sown in terms of pure live seed (PLS) shall be:

See Seed Application Table

All seed purchased will be certified to be free of the noxious weed seeds from weeds listed on the current "All States Noxious Weeds List." Test results from a certified seed analyst and seed analysis labels attached to the bags will be provided to the Forest Service.

The following kinds and amounts of standard commercial fertilizer shall be used with guaranteed analysis of contents clearly marked on containers:

See Fertilizer Application Table

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C6.601# - EROSION CONTROL SEEDING (11/98)

Seed Application Table	
Species of Seed	PLS Pounds Per Acre
Tricale-Quickguard	7.57
Bluebunch Wheatgrass Secar	1.88
Slender Wheatgrass Revenue	2.58
Sandberg Bluegrass	0.35
Idaho Fescue Joseph CT	0.36
Blue Flax Appar CT	0.28
Hairy Vetch	4.92
White Yarrow	0.06

Fertilizer Application Table	
Type of Fertilizer	Pounds Per Acre
NA	NA

C6.7# - SLASH TREATMENT (04/2003)

Slash is defined as logs, tops, limbs, and other woody material, exclusive of stumps, which is created by the logging operation and remaining on the ground after logging. In areas where Purchaser-created slash is intermingled and inseparable with pre-existing slash, slash disposal requirements shall apply to the pre-existing slash as well as the Purchaser-created slash. Such areas are designated in the Purchaser Slash Responsibility Table herein.

Slash created in the construction of Specified Roads shall not be considered as logging slash in this Section.

Unless otherwise agreed in writing, Purchaser shall perform the following work described below and/or as shown on the Sale Area and Slash Disposal Map.

Forest Service and Purchaser shall jointly develop a schedule for completion of slash treatment on the various portions of the sale area.

See Purchaser Slash Responsibility Table

C6.7# - SLASH TREATMENT (4/03)

Purchaser Slash Responsibility Table		
Description or Units	Type of Slash Disposal	Acres
All units	Pile Landing Slash	Unestimated
All units	Fell Damaged	393
All units	Roadway Vegetation	Unestimated
All units	Recruitment of Coarse Woody Debris	393
All or portions of 51, 52, 54, 55, 56, 57, 62, 63, 67, 68 & 69	Deck Firewood	226

Pile Landing Slash

A landing is a place where logs or products are gathered for loading. All slash accumulated or created at landings shall be piled in locations pre-approved by the Forest Service at least 20' away from residual timber, sized to minimize footprint and maximize height. Piles shall be reasonably compact and free of soil. Piles shall be of a size and location that will not impair road use or result in damage to residual timber. Piles shall be located to facilitate chipping operations if applicable.

The piling of landings will be done by a grapple-type machine.

Newly constructed landings may require slash filter windrows depending on proximity to RCA's. Limit the height of windrows to less than three feet and dispose of excess slash with landing slash. Slash filter windrow will not be placed against residual timber or within 20 feet of residual timber. Provide breaks every 100 to 300 feet.

Fell Damaged

Contractor shall fell all species over 4 ½ feet in height not meeting minimum diameter specifications for Included Timber that are damaged beyond recovery by the Contractor's Operations. Cut trees shall be limbed to a stem diameter of approximately 3 inches, at which point the top shall be cut from the remainder of the stem. These stems shall be lopped within 2 feet of the ground.

Roadway Vegetation

Material not meeting utilization standards shall be scattered outside the clearing limits without damaging trees. Limb all logs. Place logs and stumps 5 feet away from trees, positioned so they will not roll, and are not on top of one another. Limb and scatter other construction slash to reduce slash concentrations.

Piles can be made by machine or hand. Piles may not be more than 100 feet long to allow for wildlife and livestock passage.

Recruitment of Coarse Woody Debris

Contractor will leave a minimum of 4 tons and a maximum of 14 tons (per acre) of woody material over 3 inches in diameter on the small end and 6 feet or greater lengths scattered throughout each unit, where available. If available, larger material (15" or greater) should be used to attain at least 75% of the tonnage.

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If needed for coarse woody debris (CWD), all available cull material over 8 inches large end diameter and longer than 6 feet in length or other non-commercial material (e.g. – decked firewood and/or tops) shall be utilized to meet the CWD requirement. Preference should be given to larger diameter material to meet these requirements.

Purchaser may whole tree yard to the landing but will be required to take limbs, tops, cull material, etc. back into the woods on return trips to meet CWD and soil cover requirements. Limbs and tops returned to the woods shall be scattered adjacent to skid trails and distributed as evenly as possible. Material returned will not be wind rowed or jack pot piled. This will be done to the extent practical as determined by the Forest Service.

Deck Firewood

Western larch, Douglas-fir, and lodgepole pine logs and tops not meeting utilization specifications accumulated at landings on roads open to the public shall be decked and processed separate from saw log decks and slash piles (minimum size to be processed will be a piece 6 feet long with a small end diameter of 4 inches). Firewood shall be decked on uphill side of road if landing is in the SMZ. Cull material not needed for CWD shall be decked with firewood.

Firewood shall be processed and decked at the same time as the processing of sawtimber.

C6.71 - CHANGES IN SLASH TREATMENT (11/2006)

Slash treatment measures required in C6.7 may be changed upon written agreement. The Forest Service shall determine the current cost of performing the work to be deleted and the work to be added. When the cost of work deleted exceeds the cost of work added, the agreement shall provide for a lump sum payment to the Forest Service for the amount of the difference. When the cost of work added exceeds the cost of work deleted, the change may be made only if the Purchaser agrees to making the change with no cost adjustment.

C6.72# - TEMPORARY ROAD CONSTRUCTION SLASH DISPOSAL (01/2000)

Slash treatment methods of Temporary Road slash shall be agreed to in writing prior to construction. Temporary Road slash shall be treated in accordance with the following:

- A. All timber within the road clearing limits which contains a product meeting the minimum piece specifications stated in A2 shall be felled (not pushed over) and bucked in advance of road construction. All timber shall be felled within the clearing limits whenever it is feasible to do so.
- B. Timber within the clearing limits not meeting minimum piece specifications in A2 and other debris from the clearing and grubbing operations more than 2 inches in diameter and 3 feet in length shall either be (a) utilized and removed from Sale Area, (b) burned within the right-of-way, (c) removed to designated locations shown on Sale Area Map for burying or later burning, (d) buried, (e) processed through a chipping machine, (f) scattered in such a manner as to avoid concentrations of slash and without damaging other trees or resource values, (g) windrowed (h) decked, or (i) a combination thereof.
- C. All material to be treated or disposed of shall be bucked into lengths not to exceed 6 feet before being piled or buried.
- D. If debris is to be burned, burning shall be complete and shall be done at such times and in a manner approved in writing by Forest Service. Residual construction slash from burning shall be buried, scattered or removed to agreed locations.
- E. Debris to be buried shall be placed in prepared holes, benches, or trenches at agreed locations and covered with not less than N/A feet of native soil or rock. Slash and debris may be buried in the roadway providing hauling can be supported and providing there is little probability or hazard of slope failure.
- F. If debris is to be chipped, the chips shall be spread over the surface of the ground in such a manner that their loose depth does not exceed N/A inches. Chips may be mixed with soil within roadway.
- G. Slash and debris may be scattered in those situations where the volume of slash or residual slash is relatively light and the adjacent stands of timber are sufficiently open to accommodate the scattering without damage.
- H. When slash is to be windrowed, the windrow area shall be cleared. Windrows shall be placed parallel to and along the embankment toe. Windrows shall not be placed against trees.
- I. If material is decked, logs not meeting Utilization Standards that are 3 inches or more in diameter shall be bucked into lengths not to exceed 8 feet and piled at agreed locations

C6.824# - SCALING AS PRESENTED - SALES BY WEIGHT (04/2004)

Notwithstanding criteria in B6.82, all material presented for measurement will be weighed and paid for at rates listed in A4 on a predetermined weight factor of 57.23 pounds per cubic foot for All and N/A pounds per cubic foot for N/A.

In the event any live products are severed from the stump for a period of 90 days or more without being weighed, the Forest Service, at its discretion, may 100 percent sample, sample load scale, sample weight scale, or use any other valid and acceptable method to determine the volume. Purchaser shall bear any additional scaling costs as a result of the delay in removing the products.

C6.83# - PRODUCT ACCOUNTABILITY (10/2003)

The following requirements are applicable to Product Removal Permits:

1. Forest Service will issue to Purchaser or designated representative(s) serially numbered Product Removal Permit books for use only on this sale. Product Removal Permit books, whether used or unused, shall be accountable property of Forest Service and shall be returned to issuing Ranger District in accordance with the instructions contained on the cover of each book. Each Product Removal Permit which is not returned will be considered a lost load and charged for as described in B6.85 B6.851, as appropriate.

2. Purchaser shall require all permits be filled out in ink, and otherwise completed, by an individual named in writing, showing the date loaded, sale brand, sale name, and destination where products will be unloaded. On the Load Permit, the month, day, and year the truck is loaded shall be punched out. Each permit will then be attached to the load in accordance with instructions on the inside cover of the Product Removal Permit book. Products will not be hauled from the Sale Area without the Load Permit attached to the load.

3. Before products are hauled, the truck driver must sign the Woods Permit in ink using legal signature.

4. Each load will have the last three digits of the load receipt number painted on both ends of three logs with RED paint. All loads that consist of a truck and pup(s) must have the last three digits of the load receipt painted on both ends of three logs on all subunits of the combination.

C6.852 - WEIGHT OF LOST LOADS (11/1998)

If weight is the unit of measure, Purchaser shall present all loads for weighing and shall furnish a ticket from a certified scales for each such load. If no weight ticket is furnished for such load(s), the weight of such load(s) shall be deemed equal to the weight of the heaviest load presented during the billing period, as established by the Forest Service.

C6.853 - LOADS ALTERED IN ROUTE (09/2002)

Loads of logs which are altered as a result of compliance with State Department of Transportation weight laws will be considered a non-verified load unless a Forest Service representative can verify the overweight load was totally delivered to the scaling site. If the load is verified by the Forest Service it may be processed through the normal sample selection process.

Unless otherwise agreed to, off-loaded logs will not be stored at the weigh station site. Off-loaded logs will be delivered immediately to the designated scaling site.

Logs will be off-loaded onto an empty truck and will have a log load removal receipt attached before proceeding from the weigh station. If logs are off-loaded onto another load of logs, both loads will be considered non-verified loads.

Since non-verified loads will be larger than the largest load in the sample in any given billing period, Purchaser agrees to pay an amount equivalent to and in addition to the amount payable at Current Contract Rates.

Purchaser is required to notify the Forest Service before off-loading of logs occurs to meet Department of Transportation weight laws.

C7.2 - FIRE PRECAUTIONS (04/1979)

Specific fire precautions are as follows:

State Fire Laws. Where State laws provide specific requirements, these requirements must also be met.

Smoking and Lunch Fires. Purchaser shall prohibit smoking and the building of fires by persons engaged in Purchaser's Operations, except at established camps and shall enforce this prohibition by all means within Purchaser's power. Forest Service may, on written request of Purchaser, designate places where (1) campfires may be built for the purpose of heating lunches or (2) smoking may be permitted. Such designated places shall be cleared of flammable material to mineral soil prior to use.

Debris Around Structures. Purchaser shall clear and maintain an area free of flammable material for a distance not less than 15 feet from buildings, tents, and other structures connected with Purchaser's Operations.

Furnishing of Tools. Purchaser shall furnish sufficient fire tools of a kind and type satisfactory for fire suppression to equip persons engaged in Purchaser's Operations. Fire tools shall be used only for suppressing wildfires. Tools shall be stored in fireboxes provided by Purchaser and readily available to employees. Each toolbox shall be marked "Tools for Fire Only," painted red and kept sealed.

Fire Tools on Equipment. Each tractor, power skidder, power loader, and motor truck shall be equipped with one size 0, or larger, round-pointed shovel. Shovels shall be so placed on the machines that they can be readily obtained at all times.

Spark Arresters. Each gasoline or diesel internal combustion engine, except powersaws, shall be equipped with a spark-arresting device which has been approved by Forest Service. After installation, spark-arresting devices shall be kept in a satisfactory working condition.

Powersaws. Each gasoline powersaw shall have a spark arrester muffler affixed and in good working condition. Said spark arrester-muffler shall be of the construction and maintained to the standards approved by Forest Service. In addition, one chemical pressurized fire extinguisher of not less than 8-ounce capacity, by weight, and one size 0, or larger, round-pointed shovel shall also be provided.

The spark arrester-muffler, extinguisher, and shovel shall be maintained in good working condition at all times. The shovel and extinguisher shall be readily available.

Blasting. The use of fuses and detonating cord in blasting shall not be permitted.

During Fire Precautionary Period, blasting shall be permitted as follows:

A. When the predicted Condition Class reaches 3 (High), a watchman shall patrol the blasting area for at least 1 hour following blasting. The watchman shall have available for immediate use a standard fire shovel and a 5-gallon water filled backpack pump.

B. When the predicted Condition Class reaches 4 (Very High), blasting shall be restricted to cleared areas and terminated daily by 11 a.m. local time. The watchman requirements shall be as in item A above.

C. Blasting operations may be terminated when the predicted fire danger reaches extreme conditions.

Gasoline and Oil Storage. Gasoline, oil, grease, or other highly flammable material shall be stored in a separate building (or on site where all flammable debris has been cleared away within a radius of 25 feet). Storage buildings (or sites) shall be a minimum distance of 50 feet from other structures. A suitable shovel, and dry sand in a covered container of not less than 25-gallon capacity (or a fire extinguisher of not less than 2-quart capacity of a type approved by the Underwriter Laboratory for gasoline and oil fires), shall be placed at each gasoline and oil shed, or other motor-fueling station. Mobile servicing

units shall be equipped with a fire extinguisher of not less than 2-quart capacity of a type approved by the Underwriter Laboratory for gasoline and oil fires.

Camp Hazards. Stoves, stovepipes, chimneys, and electric wiring shall be located and maintained to the safety standards set forth in applicable sections of the Forest Service Health and Safety Code, dated March 1970, as revised.

Burning Plan. No slash burning shall be started by Purchaser without obtaining Forest Service approval of a written burning plan and also obtaining a burning permit from Forest Service.

C8.212 - MARKET-RELATED CONTRACT TERM ADDITION (11/2008)

The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52. The Producer Price Index used to determine when a drastic reduction in price has occurred is stated in A20. Purchaser will be notified whenever the Chief determines that a drastic reduction in wood product prices has occurred. If the drastic reduction criteria specified in 36 CFR 223.52 are met for 2 consecutive calendar quarters, after contract award date, Contracting Officer will add 1 year to the contract term, upon Purchaser's written request. For each additional consecutive quarter such a drastic reduction occurs, Contracting Officer will, upon written request, add an additional 3 months to the term during Normal Operating Season, except that no single 3-month addition shall extend the term of the contract by more than one year. Contracting Officer must receive Purchaser's written request for a market-related contract term addition before the expiration of this contract.

No more than 3 years shall be added to a contract's term by market-related contract term addition unless the following conditions are met:

- (i) The sale was awarded after December 31, 2006; and
- (ii) A drastic reduction in wood product prices occurred in at least ten of twelve consecutive quarters during the contract term, but not including the quarter in which the contract was awarded.

For each qualifying quarter meeting the criteria in paragraphs (i) and (ii) of this provision, the Forest Service will, upon the Purchaser's written request, add an additional 3 months during the normal operating season to the contract, except no single 3-month addition shall extend the term of a contract by more than 1 year.

In no event shall a revised contract term exceed 10 years as a result of market-related contract term addition.

Additional contract time may not be granted for those portions of the contract that have a required completion date or for those portions of the contract where Contracting Officer determines that the timber is in need of urgent removal or that timber deterioration or resource damage may result from delay.

C8.64 - DEBARMENT AND SUSPENSION CERTIFICATION (03/2018)

Pursuant to 2 CFR 180 and 2 CFR 417, Purchaser shall certify and obtain certifications from its Subcontractors regarding debarment, suspension, ineligibility, and voluntary exclusion, including additional Subcontractors obtained after award of this contract. 'Subcontractors' are participants in lower tier covered transactions.

Purchaser may rely upon a certification of a prospective Subcontractor that it is not proposed for debarment under 48 CFR 9.4, debarred, suspended, ineligible, or voluntarily excluded from participating in covered transactions or timber sales, unless Purchaser knows that the certification is erroneous.

Purchaser shall keep the certifications of its Subcontractors on file until timber sale Termination Date and any extensions thereof, and will provide a copy at the written request of Contracting Officer. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this Subsection. The knowledge and information of Purchaser is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

If Purchaser knowingly enters into a timber sale transaction with a person who is proposed for debarment under 48 CFR 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in covered transactions or timber sales, in addition to other remedies available to the Government, Forest Service may pursue available remedies, including suspension and/or debarment.

Contracting Officer shall provide a copy of Forms AD-1047, Certification Regarding Debarment, Suspension and Other Responsibility Matters-Primary Covered Transactions, and AD-1048, Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions to the Purchaser.

Purchaser shall complete form AD-1047 and provide to the Contracting Officer upon request.

Purchaser shall require each Subcontractor to complete form AD-1048 and provide to the Contracting Officer upon request.

(a) This contract is subject to the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, et seq.).

(b) Except for NONE determined pursuant to public hearing to be surplus, unprocessed Included Timber shall not be exported from the United States nor used in direct or indirect substitution for unprocessed timber exported from private lands by Purchaser or any person as defined in the Act (16 USC 620e).

(c) Timber in the following form will be considered unprocessed:

(i) Trees or portions of trees or other roundwood not processed to standards and specifications suitable for end product use;

(ii) Lumber, construction timbers, or cants intended for remanufacturing not meeting standards defined in the Act (16 USC 620e); and

(iii) Aspen or other pulpwood bolts exceeding 100 inches in length.

(d) Unless otherwise agreed in writing, unprocessed Included Timber shall be delivered to a domestic processing facility and shall not be mixed with logs intended for export.

(e) Prior to award, during the life of this contract, and for a period of 3 years from Termination Date, Purchaser shall furnish to Forest Service, upon request, records showing the volume and geographic origin of unprocessed timber from private lands exported or sold for export by Purchaser or affiliates.

(f) Prior to delivering unprocessed Included Timber to another party, Purchaser shall require each buyer, exchangee, or recipient to execute an acceptable agreement that will:

(i) Identify the Federal origin of the timber;

(ii) Specify domestic processing for the timber involved;

(iii) Require the execution of such agreements between the parties to any subsequent transactions involving the timber;

(iv) Require that all hammer brands and/or yellow paint must remain on logs until they are either legally exported or domestically processed, whichever is applicable; and

(v) Otherwise comply with the requirements of the Act (16 USC 620d).

(g) No later than 10 days following the execution of any such agreement between Purchaser and another party, Purchaser shall furnish to Forest Service a copy of each such agreement. Purchaser shall retain, for 3 years from Termination Date, the records of all sales, exchanges, or dispositions of all Included Timber.

(h) Upon request, all records dealing with origin and disposition of Included Timber shall be made available to Contracting Officer.

(i) For breach of this Section, Forest Service may terminate this contract and take such other action as may be provided by statute or regulation, including the imposition of penalties. When terminated by Forest Service under this Section, Forest Service will not be liable for any Claim submitted by Purchaser relating to the termination.